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ABSTRACT

A study was designed (1) to discover the effect of teacher expectation on student performance in the cognitive and in the psychomotor skills, and (2) to analyze students' attitudes toward teachers because of teacher expectations. The study utilized two different instructional units. The quality milk production unit was used to teach cognitive skills with emphasis on class instruction and paper and pencil tests. The small gasoline engine unit was used to teach certain psychomotor skills. Each instructional unit was taught in two comprehensive high schools. Students within each class were divided into three groups. Group one, positive expectancy students, received constructive comments on their assignments and appropriate teacher behavior during the experiment. Group two, constructive expectancy students, received constructive comments on the assignments and appropriate teacher behavior during the experiment. Group three, control group students, received no comments on their assignments and no expectancy interaction from teachers. After one month of instruction, students were tested in each subject area. Students' attitudes toward the teacher and subject were also measured before and after the experiment. The findings revealed that the teacher's expectations did change the students' attitudes toward the teacher and subject; however, written comments by the teacher on students' assignments had no significant effect on the level of student achievement. (Author/CSS)

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TEACHER EXPECTANCY RELATED TO STUDENT PERFORMANCE IN VOCATIONAL EDUCATION

PROJECT NO.

83-8003

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U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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ABSTRACT

TEACHER EXPECTANCY RELATED TO STUDENT PERFORMANCE IN VOCATIONAL EDUCATION

Himanshu S. Pandya and Samuel M. Curtis

PURPOSE OF THE STUDY:

The publication of Pygmalion in the Classroom has led the flurry of discussion regarding teacher expectation and student performance among researchers. Many researchers believe that learning is influenced by what teachers do in their interaction with students, and that what teachers do is based mostly on their beliefs and, ultimately, their expectations regarding students. In recent years, many researchers have argued that the key to learning is teaching, not the teacher.

Very few reports have been written concerning teacher expectation and student performance at the secondary school level. There is a paucity of information concerning how teacher expectation functions in vocational education, where not only cognitive but also psychomotor skills are required. The purpose of the study was two fold: (1) to discover the effect of teacher expectation on student performance in the cognitive and in the psychomotor skills, and (2) to analyze students' attitudes toward teachers because of teacher expectations.

METHOD AND DATA COLLECTION:

The study utilized two different units of instruction using the Pennsylvania State University curriculum materials. The quality milk

production unit was used to teach cognitive skills with emphasis on class instruction and paper and pencil tests. The small gasoline engine unit was used to teach certain psychomotor skills. Each unit of instruction was taught in two different comprehensive high schools. Students were divided into three, within class, groups. Group One, Positive Expectancy Students, received constructive comments on their assignments and appropriate teacher behavior during the experiment. Group Two, Constructive Expectancy Students, received constructive comments on the assignments and appropriate teacher behavior during the experiment. Group Three, Control Group Students, received no comments on their assignments and no expectancy interaction from teachers.

After one month of instruction, the students in all three groups were tested in each subject area. Students' attitudes toward the teacher and subject was also measured at the beginning and following the experiment.

FINDINGS:

In this study, the teacher's expectations had no effect on student achievement. Teacher's expectations did change the student's attitude toward the teacher and the subject, but, in this case, change in the attitude did not lead to higher achievement. Written comments by the teacher on students' assignments had no significant effect on the level of student achievement.

The failure to find any significant effects of experimental manipulation of "teacher expectation" upon student performance leads the researchers of this study to concur with others in regarding the Rosenthal and Jacobson (1968) finds as spurious.

In conclusion, it seems that the expectations of others played an influential role in the attitude of the individual, both in school and in the large social arena. Furthermore, length of expectations and an individual's perception of the various expectations are complex and were generally not examined in the investigation.

Rosenthal, R., and Jacobson, L., Pygmalion in the Classroom. New York: Holt, 1968.

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TEACHER EXPECTANCY RELATED TO STUDENT PERFORMANCE IN VOCATIONAL EDUCATION

INTRODUCTION: PURPOSE OF THE STUDY

The publication of Pygmalion in the Classroom has led the flurry of discussion regarding teacher expectation and student performance among researchers.[1] Many researchers believe that learning is influenced by what teachers do in their interaction with students, and that what teachers do is based mostly on their beliefs and, ultimately, their expectations regarding students. In recent years, many researchers have argued that the key to learning is teaching, not the teacher.

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The study utilized two different units of instruction using the Pennsylvania State University curriculum materials. The quality milk production unit was used to teach cognitive skills with emphasis on class instruction and paper and pencil tests. The small gasoline engine unit was used to teach certain psychomotor skills. Each unit of instruction was taught in two different comprehensive high schools. Students were divided into three, within class, groups. Group One, Positive Expectancy Students, received constructive comments on their assignments and appropriate teacher behavior during the experiment. Group Two, Constructive Expectancy Students, received constructive comments on the assignments and appropriate teacher behavior during the experiment. Group Three, Control Group Students, received no comments on their assignments and no expectancy interaction from teachers.

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FINDINGS

In this study, the teacher's expectations had no effect on student achievement. Teacher's expectations did change the student's attitude toward the teacher and the subject, but, in this case, change in the attitude did not lead to higher achievement. Written comments by the teacher on students' assignments had no significant effect on the level of student achievement. (Tables 1, 2, and 3).

The failure to find any significant effects of experimental manipulation of "teacher expectation" upon student performance leads the researchers of this study to concur with others in regarding the Rosenthal and Jacobson (1968) finds as spurious.

In conclusion, it seems that the expectations of others played an influential role in the attitude of the individual, both in school and in the large social arena. Furthermore, length of expectations and an individual's perception of the various expectations are complex and were generally not examined in the investigation.

RESULTS

Table 1. Mean Attitude Scores for Three Different Treatments (Positive Expectancy, Constructive Expectancy, and Control) in cognitive and psychomotor skills.

Groups	N	Attitude Scores
Positive expectancy	28	107.5
Constructive expectancy	25	106.2
Control	28	94.9[a]

[a]Significantly lower than both other groups F = 3.31, p = 0.01

Table 2. Mean Post-Test Achievement and Attitude Scores for Psychomotor Skills (Small Gasoline Engine Unit).

Groups	N	Achievement Score	Attitude Score
Replication 1 (School #1)			
Positive expectancy	7	72.3	94.6
Constructive expectancy	6	69.3	103.5
Control	7	67.4	91.6
Replication 2 (School #2)			
Postiive expectancy	7	73.7	108.1
Constructive expectancy	6	72.7	108.2
Control	8	72.5	84.6[a]
Total			
Positive expectancy	14	73.0	101.4
Constructive expectancy	12	71.0	105.8
Control	15	70.1	87.9[b]

[a]Significantly lower than both other groups F = 3.46, p = .10.

[b]Significantly lower than both other groups F = 3.60, p = .05.

Table 3. Mean Post-Test Achievement and Attitude Scores for Cognitive Skills (Quality Milk Production Unit).

Group	N	Achievement Score	Attitude Score
Replication 1 (School #1)			
Positive expectancy	9	73.3	119.1
Constructive expectancy	9	72.7	107.6
Control	9	72.5	87.4[a]
Replication 2 (School #2)			
Positive expectancy	5	72.9	112.3
Constructive expectancy	4	65.2	100.8
Control	4	64.8	110.7
Total			
Positive expectancy	14	69.5	113.6
Constructive expectancy	13	67.4	106.6
Control	13	68.6	104.5

[a]Significantly lower than other two groups $F = 5.51$, $p = .01$.

Recommendations

As a result of this study, the following recommendations are made:

1. Further studies should be conducted over a long period of time with larger populations. This study should also examine the time requirement for change in student's behavior once the student has changed the attitude.

2. The dependent student requires more attention than the independent student. It will be worth while to compare the student dependancy level and the academic achievement.

3. Other than school, students spend most of their time at home. Similar study should be conducted about the student academic achievements, and the parents and home environment.

4. Teachers use the positive and negative reinforcement in the classroom. It would be interesting to examine the effect of the positive expectancy in contrast to the effect of negative expectancy.

LIST OF THE TEACHERS AND SCHOOLS PARTICIPATING IN THE STUDY

	Teacher	School	Location
1.	Elda Connors	Derry	Derry
2.	Alda Holmquist (student teacher)	Derry	Derry
3.	Wayne Lutz	Curwensville	Curwensville
4.	Richard Snook	West Snyder	Beaver Springs
5.	Wayne Seely	Canton	Canton
6.	Carol Wolfgang (student teacher)	Curwensville	Curwensville

RESEARCH RESULTS

1. One Masters study was completed by Mr. Himansha Pandya using data from the project. (Teacher expectancy related to student performance in vocational education, Masteral thesis in Agricultural Education, The Pennsylvania State University, August 1978).

2. One paper describing project results is underway using findings from the project.